

| APPENDIX  |   |   |                    |       |                         |          |  |                                    |  |                                       |   |                          |            |            |       |  |                                  |                                  |       |
|---|---|---|--------------------|-------|-------------------------|----------|--|------------------------------------|--|---------------------------------------|---|--------------------------|------------|------------|-------|--|----------------------------------|----------------------------------|-------|
| Grants Administration Operational Information Exchange Matrix |   |   |                    |       |                         |          |  |                                    |  |                                       |   |                          |            |            |       |  |                                  |                                  |       |
| 02/22/2001 9:00   |   |   |                    |       |                         |          |  |                                    |  |                                       |   |                          |            |            |       |  |                                  |                                  |       |
| Identifier of<br>Needline<br>Supported                        | Identifier of<br>Infor-<br>mation<br>Exchange | Nature of Transaction   |                    |       |                         |          | Triggering<br>Event  | Information Source                 |  | Information Destination               |   | Performance Requirements |            |            |       | Information Assurance<br>Attributes        |                                  | Threats                          |       |
|   |   | Content   | Size<br>/Units     | Media | Collab<br>or-<br>ative? | LI<br>SI |  | Identifier of<br>Producing<br>Node | Identifier of<br>Producing<br>Activity                     | Identifier<br>of<br>Receiving<br>Node | Identifier of<br>Receiving<br>Activity                  | Frequency                | Timeliness | Throughput | Other | Privacy/<br>Dissemi-<br>nation<br>Controls | Authenti-<br>cation<br>Required? | Electronic<br>(Hackers,<br>etc.) | Other |
| 1 (Materials<br>Submission)                                   | 1a  | Request for<br>Registration<br>and<br>Registration<br>Information | Bounded -<br>small | Data  | Yes                     | TB<br>D  | Applicant<br>decides to<br>register with<br>Federal<br>Commons             | Applicant/<br>Grantee              | Register with<br>Federal<br>Commons<br>and Agency<br>(A21) | Federal<br>Commons<br>Facility        | Register with<br>Federal<br>Commons and<br>Agency (A21) | TBD                      | Seconds    | TBD        | TBD   | C/P  | No                               | UA, UM,<br>Umessage              | TBD   |
| 1   | 1b  | Organization<br>or<br>Professional<br>Profile                     | Bounded -<br>small | Data  | Yes                     | TB<br>D  | User<br>decides to<br>build or<br>update                                   | Applicant/<br>Grantee              | Build/Update<br>Profiles<br>(A22)                          | Federal<br>Commons<br>Facility        | Build/Update<br>Profiles (A22)                          | TBD                      | Seconds    | TBD        | TBD   | C/P  | Yes                              | UA, UM, L,<br>Umessage           | TBD   |
| 1   | 1c  | Information to<br>Complete<br>Application                         | Bounded -<br>Small | Data  | Yes                     | TB<br>D  | Applicant<br>decides to<br>develop<br>application<br>on Federal<br>Commons | Applicant/<br>Grantee              | Develop<br>Application<br>(A23)                            | Federal<br>Commons<br>Facility        | Develop<br>Application<br>(A23)                         | TBD                      | Seconds    | TBD        | TBD   | C/P, C/F,<br>C/I                           | Yes                              | UA, UM, L,<br>Umessage           | TBD   |
| 1   | 1d  | Submitted<br>Application  | Indeter-<br>minate | Data  | No                      | TB<br>D  | Applicant<br>submits<br>application<br>from his own<br>system              | Applicant/<br>Grantee              | Submit<br>Application<br>(A24)                             | Federal<br>Commons<br>Facility        | Submit<br>Application<br>(A24)                          | TBD                      | Minutes    | TBD        | TBD   | C/P, C/F,<br>C/I                           | Yes                              | UA, UM, L,<br>Umessage           | TBD   |
| 1   | 1e  | Status Query  | Bounded -<br>small | Data  | Yes                     | TB<br>D  | Applicant<br>poses status<br>query   | Applicant/<br>Grantee              | Query Status<br>(A25)                                      | Federal<br>Commons<br>Facility        | Query Status<br>(A25)                                   | TBD                      | Seconds    | TBD        | TBD   | C/I  | Yes                              | Umessage                         | TBD   |
| 1   | 1f  | Reports and<br>Products   | Indeter-<br>minate | Data  | No                      | TB<br>D  | Grantee<br>delivers<br>report or<br>product                                | Applicant/<br>Grantee              | Fulfill Grant<br>Objectives<br>(A5)                        | Federal<br>Commons<br>Facility        | Monitor<br>Progress and<br>Provide<br>Feedback<br>(A42) | TBD                      | Hours      | TBD        | TBD   | C/F, C/I                                   | Yes                              | UA, UM, L,<br>Umessage           | TBD   |
| 1   | 1g  | Closeout<br>Certifications<br>and<br>Information                  | Indeter-<br>minate | Data  | No                      | TB<br>D  | Grantee<br>filled out<br>Completion<br>Notification                        | Applicant/<br>Grantee              | Fulfill Grant<br>Objectives<br>(A5)                        | Federal<br>Commons<br>Facility        | Close Out<br>Award (A43)                                | TBD                      | Hours      | TBD        | TBD   | None                                       | Yes                              | UM, L,<br>Umessage               | TBD   |
| 2 (Materials<br>Receipt)                                      | 2a  | Registration<br>Notice  | Bounded -<br>small | Data  | No                      | TB<br>D  | Applicant/<br>Grantee<br>requests to<br>be<br>registered                   | Federal<br>Commons<br>Facility     | Register with<br>Federal<br>Commons<br>and Agency<br>(A21) | Grant<br>Making<br>Agency             | Register with<br>Federal<br>Commons and<br>Agency (A21) | TBD                      | Seconds    | TBD        | TBD   | None                                       | Yes                              | UA, UM,<br>Umessage              | TBD   |
| 2   | 2b  | Organizational<br>or<br>Professional<br>Profile                   | Bounded -<br>small | Data  | No                      | TB<br>D  | Request<br>from Agency   | Federal<br>Commons<br>Facility     | Build/Update<br>Profiles<br>(A22)                          | Grant<br>Making<br>Agency             | Evaluate<br>Application<br>(A31)                        | TBD                      | Seconds    | TBD        | TBD   | C/P  | Yes                              | UA, UM, L,<br>Umessage           | TBD   |

|                          |    |  |                 |      |    |      |   |                          |  |                          |  |     |         |     |     |                           |     |                     |     |
|--------------------------|----|--|-----------------|------|----|------|---|--------------------------|--|--------------------------|--|-----|---------|-----|-----|---------------------------|-----|---------------------|-----|
| 2                        | 2c | Submitted Application                        | Indeterminate   | Data | No | TB D | Federal Commons receives grant application              | Federal Commons Facility | Submit Application (A24)                       | Grant Making Agency      | Evaluate Application (A31)                     | TBD | Hours   | TBD | TBD | C/P, C/F, C/I             | No  | UA, UM, L, Umessage | TBD |
| 2                        | 2d | Status Query                                 | Bounded - small | Data | SC | TB D | Federal Commons receives query from applicant           | Federal Commons Facility | Query Status (A25)                             | Grant Making Agency      | Provide Application Status (A32)               | TBD | Seconds | TBD | TBD | C/I                       | No  | Umessage            | TBD |
| 2                        | 2e | Reports and Products                         | Indeterminate   | Data | No | TB D | Federal Commons receives report or product from grantee | Federal Commons Facility | Fulfill Grant Objectives (A5)                  | Grant Making Agency      | Monitor Progress and Provide Feedback (A42)    | TBD | Hours   | TBD | TBD | C/F, C/I                  | No  | UA, UM, L, Umessage | TBD |
| 2                        | 2f | Closeout Certifications and Information      | Indeterminate   | Data | No | TB D | Federal Commons receives Certs and Info from grantee    | Federal Commons Facility | Fulfill Grant Objectives (A5)                  | Grant Making Agency      | Close Out Award (A43)                          | TBD | Minutes | TBD | TBD | None                      | No  | UM, L, Umessage     | TBD |
| 3 (Grantee Notification) | 3a | Permanent Relationship Approval              | Bounded - small | Data | No | TB D | Agency decides to grant permanent relationship          | Grant Making Agency      | Register with Federal Commons and Agency (A21) | Federal Commons Facility | Register with Federal Commons and Agency (A21) | TBD | Seconds | TBD | TBD | None - Public Information | No  | UM, L, Umessage     | TBD |
| 3                        | 3b | Request for Profile                          | Bounded - small | Data | No | TB D | Agency wants to see profile                             | Grant Making Agency      | Evaluate Application (A31)                     | Federal Commons Facility | Evaluate Application (A31)                     | TBD | Seconds | TBD | TBD | None                      | No  | Umessage            | TBD |
| 3                        | 3c | Application Status                           | Bounded - small | Data | SC | TB D | Agency receives status query from Federal Commons       | Grant Making Agency      | Provide Application Status (A32)               | Federal Commons Facility | Provide Application Status (A32)               | TBD | Seconds | TBD | TBD | C/I                       | Yes | UM, L               | TBD |
| 3                        | 3d | Award Notification with Terms and Conditions | Indeterminate   | Data | No | TB D | Agency makes grant award decision                       | Grant Making Agency      | Evaluate Application (A31)                     | Federal Commons Facility | Evaluate Application (A31)                     | TBD | Minutes | TBD | TBD | None - Public Information | No  | UM, L, Umessage     | TBD |
| 3                        | 3e | Feedback                                     | Indeterminate   | Data | No | TB D | Agency has comments, redirection for grantee            | Grant Making Agency      | Monitor Progress and Provide Feedback (A42)    | Federal Commons Facility | Monitor Progress and Provide Feedback (A42)    | TBD | Hours   | TBD | TBD | C/I                       | No  | UA, UM, L           | TBD |
| 3                        | 3f | Notification of Pending Payment              | Bounded - small | Data | No | TB D | Payment authorization is generated                      | Grant Making Agency      | Authorize Grant Payments (A41)                 | Federal Commons Facility | Authorize Grant Payments (A41)                 | TBD | Minutes | TBD | TBD | C/F                       | No  | UA, UM, L, Umessage | TBD |
| 3                        | 3g | Completion Notification                      | Bounded - small | Data | No | TB D | Agency decides to terminate grant                       | Grant Making Agency      | Monitor Progress and Provide Feedback (A42)    | Federal Commons Facility | Monitor Progress and Provide Feedback (A42)    | TBD | Hours   | TBD | TBD | C/I                       | No  | UM, L, Umessage     | TBD |

|   |    |   |                 |               |     |     |  |                                       |  |                     |  |     |         |     |     |                           |     |                     |     |
|---|----|---|-----------------|---------------|-----|-----|--|---------------------------------------|--|---------------------|--|-----|---------|-----|-----|---------------------------|-----|---------------------|-----|
| 4 (Forwarded Notification)                            | 4a | Provisional Relationship with account password              | Bounded - small | Data (e-mail) | No  | TBD | Applicant organization registers with Federal Commons                    | Federal Commons Facility              | Register with Federal Commons and Agency (A21) | Applicant/Grantee   | Register with Federal Commons and Agency (A21) | TBD | Seconds | TBD | TBD | C                         | No  | UA                  | TBD |
| 4   | 4b | Form Elements   | Bounded - small | Data          | No  | TBD | Applicant wants to download grant application forms to his own equipment | Federal Commons Facility (assumption) | Develop Application (A23)                      | Applicant/Grantee   | Develop Application (A23)                      | TBD | Minutes | TBD | TBD | None - Public Information | No  | UA, UM              | TBD |
| 4   | 4c | Application Status  | Bounded - small | Data          | Yes | TBD | Federal Commons receives status query answer from agency                 | Federal Commons Facility              | Provide Application Status (A32)               | Applicant/Grantee   | Query Status (A25)                             | TBD | Seconds | TBD | TBD | C/I                       | Yes | UM, L               | TBD |
| 4   | 4d | Award Notification with Terms and Conditions                | Indeterminate   | Data          | No  | TBD | Federal Commons receives award notice from agency                        | Federal Commons Facility              | Evaluate Application (A31)                     | Applicant/Grantee   | Fulfill Grant Objectives (A5)                  | TBD | Minutes | TBD | TBD | None - Public Information | No  | UM, L, Umessage     | TBD |
| 4   | 4e | Feedback  | Indeterminate   | Data          | No  | TBD | Federal Commons receives agency comments, redirection for Grantees       | Federal Commons Facility              | Monitor Progress and Provide Feedback (A42)    | Applicant/Grantee   | Fulfill Grant Objectives (A5)                  | TBD | Hours   | TBD | TBD | C/I                       | No  | UA, UM, L, Umessage | TBD |
| 4   | 4f | Notification of Pending Payment                             | Bounded - small | Data          | No  | TBD | Payment authorization is generated                                       | Federal Commons Facility              | Authorize Grant Payments (A41)                 | Applicant/Grantee   | Fulfill Grant Objectives (A5)                  | TBD | Seconds | TBD | TBD | C/F                       | No  | UA, UM, L, Umessage | TBD |
| 4   | 4g | Completion Notification                                     | Bounded - small | Data          | No  | TBD | Federal Commons receives completion notice from agency                   | Federal Commons Facility              | Monitor Progress and Provide Feedback (A42)    | Applicant/Grantee   | Fulfill Grant Objectives (A5)                  | TBD | Hours   | TBD | TBD | C/I                       | No  | UM, L, Umessage     | TBD |
| 5 (Direct Applicant/Grantee Communications to Agency) | 5a | Questions for Agency  | Indeterminate   | Data, Paper   | No  | TBD | Applicant needs clarification  | Applicant/Grantee                     | Develop Application (A23)                      | Grant Making Agency | Evaluate Application (A31)                     | TBD | Hours   | TBD | TBD | None - Public Information | No  | UM, L, Umessage     | TBD |
| 5   | 5b | Request and Information to Establish Permanent Registration | Bounded - small | Data, fax     | No  | TBD | Applicant or grantee requests trusted permanent relationship with agency | Applicant/Grantee                     | Register with Federal Commons and Agency (A21) | Grant Making Agency | Register with Federal Commons and Agency (A21) | TBD | Hours   | TBD | TBD | None                      | No  | Umessage            | TBD |

|  |    |   |                 |                         |    |     |   |                      |  |                           |  |     |         |     |     |                           |     |                     |     |
|--|----|---|-----------------|-------------------------|----|-----|---|----------------------|--|---------------------------|--|-----|---------|-----|-----|---------------------------|-----|---------------------|-----|
| 6 (Direct Agency Communication to Applicant/Grantee) | 6a | Answers from Agency                         | Indeterminate   | Data, Paper             | No | TBD | Answer prepared                                   | Grant Making Agency  | Evaluate Application (A31)                     | Applicant/Grantee         | Develop Application (A23)  | TBD | Hours   | TBD | TBD | None - Public Information | No  | UM, L, Umessage     | TBD |
| 6  | 6b | Permanent Relationship                      | Bounded - small | Data, Paper, Fax, Phone | No | TBD | Agency decision to establish trusted relationship | Grant Making Agency  | Register with Federal Commons and Agency (A21) | Applicant/Grantee         | Register with Federal Commons and Agency (A21)                         | TBD | Days    | TBD | TBD | None                      | No  | UM, L, Umessage     | TBD |
| 6  | 6c | Questions for Applicant                     | Indeterminate   | Data, paper, fax        | No | TBD | Grantor needs additional information              | Grant Making Agency  | Evaluate application (A31)                     | Applicant/Grantee         | Develop Application (A23)  | TBD | Hours   | TBD | TBD | C/F, C/I                  | No  | UM, L, Umessage     | TBD |
| 6  | 6d | Feedback                                    | Indeterminate   | Data, paper, phone, fax | No | TBD | Agencies have comments, redirection for Grantees  | Grant Making Agency  | Monitor Progress and Provide Feedback (A42)    | Applicant/Grantee         | Fulfill Grant Objectives (A5)  | TBD | Hours   | TBD | TBD | C/I                       | No  | UA, UM, L, Umessage | TBD |
| 7 (Assessment Request)                               | 7a | Technical Portions of Submitted Application | Indeterminate   | Data                    | No | TBD | Agency wants outside technical review             | Grant Making Agency  | Evaluate Application (A31)                     | External (Reviewers)      | External   | TBD | Hours   | TBD | TBD | C/I                       | No  | UA, UM              | TBD |
| 7  | 7b | Technical Portions of Reports and Products  | Indeterminate   | Data                    | No | TBD | Agency wants outside technical review             | Grant Making Agency  | Monitor Progress and Provide Feedback (A42)    | External (Reviewers)      | External   | TBD | Hours   | TBD | TBD | C/I                       | No  | UA, UM              | TBD |
| 8 (Technical Reviews)                                | 8a | Technical Reviews                           | Indeterminate   | Data, paper             | No | TBD | Reviewers complete review                         | External (Reviewers) | External                                       | Grant Making Agency       | Evaluate Applications (A31), Monitor Progress & Provide Feedback (A42) | TBD | Minutes | TBD | TBD | C/I                       | No  | UM, Umessage        | TBD |
| 9 (Payment Orders)                                   | 9a | Authorization for Payment                   | Bounded - small | Data, Paper             | No | TBD | Payment to Grantee has been authorized            | Grant Making Agency  | Authorize Grant Payments (A41)                 | External (Payment Agents) | External   | TBD | Minutes | TBD | TBD | C/P, C/F                  | Yes | UA, UM, L, Umessage | TBD |